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Conc.*

33. (New) An apparatus as claimed in claim 23, 24, or 32, wherein said second signal is synchronized according to said first signal in such a way that: a) said second signal is permitted to show an arbitrary phase difference in relation to the said first signal; b) said second signal is permitted to show an acceptable phase jitter in relation to said first signal; and c) said second signal is not permitted to show any persistent phase drift in relation to said first signal.

Remarks

By the above, applicant has amended the application so that no multiply-dependent claim depends from another multiply-dependent claim to comply with 37 C.F.R. § 1.75(c). It is respectfully submitted that the above amendments are not narrowing amendments pursuant to *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 122 S. Ct. 1831 (2002) (*see also Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 234 F.3d 558 (Fed. Cir. 2000) (*en banc*)), since they do not change the scope of the claims as originally filed. Entry of the above amendments is respectfully requested.

Respectfully submitted,

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EXHIBIT A

MARKED-UP VERSION OF THE CLAIMS
FOR U.S. APPLICATION SERIAL NO. 10/009,552

3. (Amended) A method as claimed in claim 1 [or 2], further comprising determining an entering into a state of possible frame buffer inconsistency caused by said write pointer being advanced into designating the same frame buffer as the frame buffer designated by said read pointer.
7. (Amended) A method as claimed in claim 5 [or 6], wherein said causing a buffer consistency violation event comprises affecting one or both of said pointers so that the frame buffer designated by said write pointer is at least two frame buffers ahead, in said round-robin fashion, of the frame buffer designated by said read pointer.
9. (Amended) A method as claimed in claim 1 [or 2], further comprising determining an entering into of a state of possible frame buffer inconsistency caused by said read pointer being advanced into designating the same frame buffer as the frame buffer designated by said write pointer.
13. (Amended) A method as claimed in claim 11 [or 12], wherein said causing a buffer consistency violation event comprises affecting one or both of said pointers so that the frame buffer designated by said read pointer is at least two frame buffers ahead, in said round-robin fashion, of the frame buffer designated by said write pointer.
15. (Amended) A method as claimed in claim 4, 7, 10, [or] 13, 27, 28, 29, or 30, comprising generating, if said affecting is performed, a signal indicating that a frame slip has occurred.
16. (Amended) A method as claimed in claim[s] 4, 7, 10, 13, or] 15, wherein said affecting of one or more of said pointers comprises affecting only said read pointer.
24. (Amended) An apparatus for transferring time slot data between ports of a switch, said apparatus comprising means for performing the method as claimed in claim[s] 1[-22].

25. (Amended) An apparatus as claimed in claims 23, [or] 24, or 32, comprising: N input ports and M output ports; N write pointer means of the above mentioned kind, each one being provided to operate in relation to a respective input port; N storing means of the above mentioned kind, each one being provided to temporarily store frames of time slot data received at a respective input port; N×M read pointer means of the above mentioned kind, each one being provided to operate in relation to a respective input/output port combination; and N×M control means of the above mentioned kind, each one being provided to operate in relation to a respective input/output port combination.

26. (Amended) An apparatus as claimed in claim 23[, 24, or 25], wherein said second signal is synchronized according to said first signal in such a way that: a) said second signal is permitted to show an arbitrary phase difference in relation to the said first signal; b) said second signal is permitted to show an acceptable phase jitter in relation to said first signal; and c) said second signal is not permitted to show any persistent phase drift in relation to said first signal.

EXHIBIT B
THE CLAIMS WHICH WILL BE PENDING
UPON ENTRY OF THE PRELIMINARY AMENDMENT
FOR U.S. APPLICATION SERIAL NO. 10/009,552

1. A method for controlling data transferring, said method comprising the steps of: temporarily storing frames of slots received via an input port of a switch in three or more frame buffers;

providing a write pointer designating which one of said three or more frame buffers that is currently used for storing a frame of slots that is currently received via said input port; providing a read pointer designating which one of said three or more frame buffers that is currently used for reading data to be transmitted from an out-put port of said switch;

advancing said write pointer into designating a next one of said three or more frame buffers in a round-robin fashion as a result of each occurrence of a first signal that is related to the start of a next frame of slots that is received via said input port;

advancing said read pointer into designating a next one of said three or more frame buffers in a round-robin fashion as a result of each occurrence of a second signal that is related to the start of a next frame of slots to be transmitted from said output port;

initiating said pointers by detecting which one of said first signal and said second signal that is received first in time and adjusting one or both of said pointers so that, if said first signal is received first, the frame buffer designated by said write pointer is at least two frame buffers ahead, in said round-robin fashion, of the frame buffer designated by said read pointer, or, if said second signal is received first, the frame buffer designated by said read pointer is at least two frame buffers ahead, in said round-robin fashion, of the frame buffer designated by said write pointer.

2. A method as claimed in claim 1, wherein the initiating step is performed individually for each input/output port combination of a switch having at least one input port and one or more output ports.

3. A method as claimed in claim 1, further comprising determining an entering into a state of possible frame buffer inconsistency caused by said write pointer being advanced into designating the same frame buffer as the frame buffer designated by said read pointer.

4. A method as claimed in claim 3, comprising affecting, as a result of said entering into said state of possible frame buffer inconsistency, one or both of said pointers so that the frame buffer designated by said write pointer is at least two frame buffers ahead, in said round-robin fashion, of the frame buffer designated by said read pointer.

5. A method as claimed in claim 3, comprising: detecting, in said state of possible frame buffer inconsistency, if said write pointer is advanced into designating a next one of said frame buffers as a result of reception of said first signal; and, if so, causing a buffer consistency violation event.

6. A method as claimed in claim 3, comprising: detecting, in said state of possible frame buffer inconsistency, if the frame buffer designated by said read pointer is accessed for retrieval of time slot data to be transmitted from said output port; and, if so, causing a buffer consistency violation event.

7. A method as claimed in claim 5, wherein said causing a buffer consistency violation event comprises affecting one or both of said pointers so that the frame buffer designated by said write pointer is at least two frame buffers ahead, in said round-robin fashion, of the frame buffer designated by said read pointer.

8. A method as claimed in claim 3, comprising: detecting, in said state of possible frame buffer inconsistency, if said read pointer is advanced into designating a next one of said frame buffers as a result of reception of said second signal; and, if so, determining said state of possible frame buffer inconsistency as being at least temporarily eliminated.

9. A method as claimed in claim 1, further comprising determining an entering into of a state of possible frame buffer inconsistency caused by said read pointer being advanced into designating the same frame buffer as the frame buffer designated by said write pointer.

10. A method as claimed in claim 9, comprising affecting, as a result of said entering into said state of possible frame buffer inconsistency, one or both of said pointers so that the frame buffer currently designated by said read pointer is at least two frame buffers ahead, in said round-robin fashion, of the frame buffer designated by said write pointer.

11. A method as claimed in claim 9, comprising: detecting, in said state of possible frame buffer inconsistency, if said read pointer is advanced into designating a next one of said frame buffers as a result of reception of said second signal; and, if so, causing a buffer consistency violation event

12. A method as claimed in claim 9, comprising: detecting, in said state of possible frame buffer inconsistency, if the frame buffer designated by said write pointer is accessed for storing a frame of data that is currently received via said input port; and, if so, causing a buffer consistency violation event

13. A method as claimed in claim 11, wherein said causing a buffer consistency violation event comprises affecting one or both of said pointers so that the frame buffer designated by said read pointer is at least two frame buffers ahead, in said round-robin fashion, of the frame buffer designated by said write pointer.

14. A method as claimed in claim 9, comprising: detecting, in said state of possible frame buffer inconsistency, if said write pointer is advanced into designating a next one of said frame buffers as a result of reception of said first signal; and, if so, determining said state of possible frame buffer inconsistency as being at least temporarily eliminated.

15. A method as claimed in claim 4, 7, 10, 13, 27, 28, 29, or 30, comprising generating, if said affecting is performed, a signal indicating that a frame slip has occurred.

16. A method as claimed in claim 15, wherein said affecting of one or more of said pointers comprises affecting only said read pointer.

17. A method for controlling data switching, said method comprising the steps of: temporarily storing frames of slots received via an input port of a switch in three or more frame buffers;

providing a write pointer designating which one of said three or more frame buffers that is currently used for storing a frame of slots that is currently received via said input port;

providing a read pointer designating which one of said three or more frame buffers that is currently used for reading data to be transmitted from an output port of said switch;

advancing said write pointer into designating a next one of said three or more frame buffers in a round-robin fashion as a result of each reception of a first signal that is related to the start of a next frame of slots that is received via said input port;

advancing said read pointer into designating a next one of said three or more frame buffers in a round-robin fashion as a result of each reception of a second signal that is related to the start of a next frame of slots to be transmitted from said output port;

determining if one of said pointers is advanced into designating the same frame buffer as the frame buffer designated by the other one of said pointers, thereby causing a state of possible frame buffer inconsistency.

18. A method as claimed in claim 17, comprising detecting, in said state of possible frame buffer inconsistency, an event implying an actual buffer consistency violation.

19. A method as claimed in claim 17, comprising affecting, if said event is detected, one or both of said pointers so that the frame buffer designated by the pointer that was advanced last is at least two frame buffers ahead, in said round-robin fashion, of the frame buffer designated by the other pointer.

20. A method as claimed in claim 18, comprising generating, if said event is detected, a signal indicating that a buffer consistency violation has occurred.

21. A method as claimed in claim 18, comprising generating, if said event is detected, a signal indicating that a frame slip has occurred.

22. A method as claimed in claim 19, wherein said affecting of one or more of said pointers comprises affecting only said read pointer.

23. An apparatus for switching data between ports of said apparatus, said apparatus comprising:

storage means providing three or more frame buffers to be used for temporarily storing frames of slots received via an input port of said apparatus;

write pointer means for designating which one of said three or more frame buffers that is currently used for storing a frame of slots that is currently received via said input port, said write pointer means being arranged to advance to designate a next one of said three or more

frame buffers in a round-robin fashion as a result of each reception of a first signal that is related to the start of a next frame of slots that is received at said input port;

read pointer means for designating which one of said three or more frame buffers that is currently used for reading data to be transmitted from an output port of said apparatus, said read pointer means being arranged to advance to designate a next one of said three or more frame buffers in a round-robin fashion as a result of each reception of a second signal that is related to the start of a next frame of slots to be transmitted from said output port; and

control means for controlling the operation of said pointer means, said control means being arranged to initiate said read pointer means by detecting which one of said first signal and said second signal that is received first in time after a selected point in time and to control one or both of said pointer means so that, if said first signal is received first, the frame buffer designated by said write pointer means is at least two frame buffers ahead, in said round-robin fashion, of the frame buffer designated by said read pointer means, or so that, if said second signal is received first, the frame buffer designated by said read pointer means is at least two frame buffers ahead, in said round-robin fashion, of the frame buffer designated by said write pointer means.

24. An apparatus for transferring time slot data between ports of a switch, said apparatus comprising means for performing a method as claimed in claim 1.

25. An apparatus as claimed in claim 23, 24, or 32 comprising: N input ports and M output ports; N write pointer means of the above mentioned kind, each one being provided to operate in relation to a respective input port; N storing means of the above mentioned kind, each one being provided to temporarily store frames of time slot data received at a respective input port; N×M read pointer means of the above mentioned kind, each one being provided to operate in relation to a respective input/output port combination; and N×M control means of the above mentioned kind, each one being provided to operate in relation to a respective input/output port combination.

26. An apparatus as claimed in claim 25, wherein said second signal is synchronized according to said first signal in such a way that: a) said second signal is permitted to show an arbitrary phase difference in relation to the said first signal; b) said second signal is permitted to show an acceptable phase jitter in relation to said first signal; and c) said second signal is not permitted to show any persistent phase drift in relation to said first signal.

27. A method as claimed in claim 2, further comprising determining an entering into a state of possible frame buffer inconsistency caused by said write pointer being advanced into designating the same frame buffer as the frame buffer designated by said read pointer.

28. A method as claimed in claim 6, wherein said causing a buffer consistency violation event comprises affecting one or both of said pointers so that the frame buffer designated by said write pointer is at least two frame buffers ahead, in said round-robin fashion, of the frame buffer designated by said read pointer.

29. A method as claimed in claim 2, further comprising determining an entering into of a state of possible frame buffer inconsistency caused by said read pointer being advanced into designating the same frame buffer as the frame buffer designated by said write pointer.

30. A method as claimed in claim 12, wherein said causing a buffer consistency violation event comprises affecting one or both of said pointers so that the frame buffer designated by said read pointer is at least two frame buffers ahead, in said round-robin fashion, of the frame buffer designated by said write pointer.

31. A method as claimed in claim 4, 7, 10, 13, 27, 28, 29, or 30 wherein said affecting of one or more of said pointers comprises affecting only said read pointer.

32. An apparatus for transferring time slot data between ports of a switch, said apparatus comprising means for performing the method as claimed in claim 17.

33. An apparatus as claimed in claim 23, 24, or 32, wherein said second signal is synchronized according to said first signal in such a way that: a) said second signal is permitted to show an arbitrary phase difference in relation to the said first signal; b) said second signal is permitted to show an acceptable phase jitter in relation to said first signal; and c) said second signal is not permitted to show any persistent phase drift in relation to said first signal.